

### **Abstract**

In an apparatus and method for locking the wavelength of a laser, a fringe-producing optical element is disposed directly in the in the output beam from the laser. The fringe-producing optical element produces a fringe pattern  
5 in a second light beam derived from the output beam. The fringe pattern is detected by a detector unit. Signals generated by the detector unit are used to generate a laser tuning control signal that tunes the laser to a desired operating wavelength.

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